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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/799,671

Applicant(s)

MUTIKAINEN ET AL.

Examiner

BEN H. LIU

Art Unit

2464

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-35, 37-43 and 45-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-35, 37-43 and 45-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This is in response to an amendment/response filed on December 21st, 2009.
2. Claims 1, 35, 43, and 54-58 have been amended.
3. No claims have been cancelled.
4. No new claims have been added.
5. Claims 1-12, 14-35, 37-43, and 45-59 are currently pending.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-10, 14-35, 37-43, and 45-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyllander et al. (U.S. Patent 7,065,199) in view of Chaney et al. (U.S. Patent 7,184,415) and further in view of Chow et al. (U.S. Patent 6,535,730).

For claim 1, Hyllander et al. disclose a method comprising:

transmitting via a data path a call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network *(see column 2 lines 57-63 and figure 2, which recite transmitting a connection request to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9);*

receiving at the user terminal via the data path a temporary routing number as a call routing number for the requested call service, the temporary routing number received in response

to the call request (*see column 3 lines 1-7, which recite the subscriber that receives a server's telephone number as a temporary routing number*);

establishing a circuit-switched call leg connection from the user terminal to a packet-switched network via a circuit-switched network (*see figure 2, which recite a user terminal 8 that establishes a circuit-switched call leg to the packet-switched network 3 via circuit-switched GSM network 9*), using the temporary routing number as the routing number for the requested call service (*see column 3 lines 8-14, which recite establishing the connection from the user terminal to a packet-switched network by calling a number provided by application server, wherein the number provided by the application server functions as a temporary routing number*), wherein the circuit-switched call leg connection is used for providing a packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*); and

using the received temporary routing number to set up the circuit-switched call leg as a call leg of the call service (*see column 3 lines 8-14 and figure 2, which recite the subscriber terminal 8 that establishes a circuit-switched call leg to the GSM network 9 by calling the provided server telephone number*).

Hyllander et al. disclose establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network (*see figures 1 and 2*). Hyllander et al. disclose the subject matter of the claimed invention with the exception that the call connection is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications

network (*see abstract*). The method and system includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the conference server 152 to invite two or more participants to a conference call as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by coupling the Conference Server 152 as taught by Chaney et al. with the Telephony/Internet Server 11 as taught by Hyllander et al. Specifically, the Telephony/Internet Server 11 can be modified to forward call requests to the Conference Server 152 as taught by Chaney et al. rather than a specific internet user as taught by Hyllander et al. The combined functionality of the Conference Server 152 and Telephony/Internet Server 11 facilitates the reception and response to a conference request via SMS as taught by Hyllander et al. as well as the ability to invite additional parties to a conference call as taught by Chaney et al. The motivation for using the conference server that provides a conference service to multiple participants as suggested by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the system by allowing more than two parties to participate in a conference call.

Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the temporary routing number is sent to at least one other participant at one or more other user terminals connected to the application server via the circuit switched network or via one or more other circuit switched networks. However, Chow et al. disclose a

wireless system that allows a subscriber to perform call conference calling (*see column 2 lines 30-44*). A third party on a circuit switched network receives an incoming call as a request for the third party to join a conference call (*see column 9 lines 9-32*). The incoming call may be received as a SMS message with information regarding the conference call (*see column 4 lines 25-49*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that allows a subscriber to perform call conferencing by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks as taught by Chaney et al. and Hyllander et al. The Conference Server 152 as taught by Chaney et al. can be configured to send additional conference requests to add participants to a conference call as taught by Chow et al. The additional conference requests can be forwarded from the Conference Server 152 to the Telephony/Internet Server 11, which can then send the SMS requests as taught by Hyllander et al. The motivation for using the system that allows a subscriber to perform call conference calling by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks is to improve the usability of the system by allowing additional participants on a circuit switched network to be added to conference calls.

For claim 2, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the receiving comprises receiving a routing number comprising an E.164 number (*see column 2 lines 57-63, which recite delivering the server telephone number as the routing number*).

For claim 3, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the delivering step comprises performing using at least one session initiation protocol session setup message. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 4, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the session initiation protocol session is kept active during the circuit-switched call. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*) for the duration of the call (*see column 12 lines 19-23*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call

control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 5, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising detecting whether the circuit-switched call leg is supported by the user terminal and the packet-switched network before the delivering step (*see column 3 lines 61-62, which recite determining whether a call connection is possible*).

For claim 6, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the detecting comprises performing within a registration procedure (*see column 3 lines 52-62, which recite determining whether a call connection is possible when a call request is registered*).

For claim 7, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, wherein the establishing comprises establishing the circuit-switched call leg comprising a call leg from an originating call (*see column 3 lines 8-14, which recite receiving a circuit-switched call from the originating caller*).

For claim 8, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the establishing step comprises establishing the circuit-switched call leg comprising a call leg from a terminating call (*see figure 1, which recite establishing a connection to a terminating telephone 2 on a circuit-switched PSTN network*).

For claim 9, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, wherein the receiving step comprises delivering the routing number to the user terminal from a call control element of the packet-switched network (*see column 3 lines 1-7, which recite delivering a routing number from a telephony/internet server*).

For claim 10, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the establishing comprises locating the user terminal outside a home network of the user terminal. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that facilitates communication between terminals that are outside of their home networks (*see figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to facilitate communication between terminals outside of their home networks as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. Communication between terminals outside of their home networks can be implemented by installing a Presence and Instant Messaging (PIM) server 18 as taught by Chaney et al. in the IP network to forward messages to mobile terminals outside of their home networks. The

motivation for facilitating communication between terminals outside of their home network with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing the network to provide services to a terminal by only knowing its network ID.

For claim 14, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising the step of selecting participants of the call and adding to the call request an information specifying the selected participants (*see column 2 lines 57-63, which recite a connection request specifying the participants*).

For claim 15, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the transmitting comprises performing based on a pre-configured address information (*see column 8 lines 32-34, which recite transmitting the specific address of the subscriber and Internet user*).

For claim 16, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising setting the pre-configured address information in a service subscription stage (*see column 8 lines 27-34, which recite transmitting the specific address of the subscriber and Internet user while requesting for a connection*).

For claim 17, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising adding session-related information to the call request, the session-related information comprising at least one of a subject: picture of the subject, payer of the call, importance of the call session, animation,

video clip, sound clip, and textual description (*see column 2 lines 57-63, which recite transmitting a connection request with a textual description*).

For claim 18, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the transmitting comprises transmitting via the data path comprising a short message service channel (*see column 2 lines 27-30, which recite using a SMS channel*).

For claim 19, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the transmitting step comprises transmitting via the data path that comprises a unstructured supplementary service data, wireless application protocol, or hyper text transfer protocol channel (*see column 10 lines 43-55, which recite transmitting along a data path using GSM alternate speech/data services*).

For claim 20, Hyllander et al. and Chow disclose all the subject matter of the claimed invention with the exception wherein the transmitting and receiving steps comprise using session initiation protocol. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The

motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 21, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the transmitting and receiving steps comprise performing using at least one session initiation protocol or service description protocol extension for communicating circuit-switched specific information. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 22, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the providing step comprises

setting up the circuit-switched connection to a media gateway control device which then routes the circuit-switched call to the application server (*see column 8 lines 10-20, which recite a server that receives a circuit-switched call from a subscriber and transfers that call to an Internet user*).

For claim 23, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network, further comprising converting the routing number into a packet-switched call address at the media gateway control device (*see column 8 lines 10-20, which recite associating a telephone number with an Internet address to allow for a connection between the two networks*).

For claim 24, Hyllander et al. disclose all the subject matter of the claimed invention but does not explicitly disclose reserving the routing number as a temporary conference routing number at the application server during establishment of the conference call; and releasing the routing number for reuse after releasing the conference call. However, Hyllander et al. disclose a system for establishing a connection between a circuit-switched network and packet-switched network that provides a telephone number for subscribers to access conference calls hosted by the server (*see column 2 lines 57-63*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to designate telephone numbers to serve specific conference calls. Specific telephone numbers can be used with the server that hosts conference calls by configuring the server to accept and manage a calls made to a pool of telephone numbers allocated to the server. The motivation for using a specific telephone numbers is to increase the capacity of the server by allowing the reuse of telephone numbers.

For claim 25, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception that the method for establishing a connection between a

circuit-switched network and packet-switched network further comprises forwarding a join request to join the conference call from the application server to other participants specified in the conference request via a data path. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is transmitted using a SIP INVITE message (*see column 5 lines 22-31*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 26, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the forwarding comprises transmitting the request using a session initiation protocol invite message triggered by a received session initiation protocol refer message. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is

transmitted using a SIP INVITE message (*see column 5 lines 22-31*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 27, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the forwarding comprises forwarding the join request, the join request comprising: at least one of an identification of the conference initiator; a subject of the conference call; a price of the conference call leg; and an information about a moderation of the conference call, an animation, a video clip, a sound clip, and a textual description. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is transmitted using a SIP REFER message that includes a textual description (*see column 8 lines 55-64*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for

establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 28, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding, via another data path, the conference routing number from the application server to a requested participant specified in the conference request to indicate that the conference call will be established from the conference number to the requested participant, wherein at least one circuit-switched connection is set up from the application server using the conference number as a calling party number via a media gateway control device, which then routes the conference call to the requested participant. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is transmitted using a SIP INVITE message to another participant (*see column 5 lines 22-31*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al.

with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 29, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding a kick-out request to the application server via the data path to have a participant excluded from the conference call. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The SIP standard provides a BYE message that allows established connections to be terminated thus excluding the user of the terminated connection from the conference. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive

SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 30, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding the kick-out request, said kick-out request comprises an identification of the conference call and an identification of at least one the participant to be excluded. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The SIP standard provides a BYE message that allows established connections to be terminated thus excluding the user of the terminated connection from the conference. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched

network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 31, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the receiving comprises receiving the temporary routing number for the call, the call supports at least one of: an audio component, a non-real time video component; an application component; and a messaging component (*see column 2 lines 43-56, which recite establishing a telephony/Internet connection*).

For claim 32, Hyllander et al. disclose a method for establishing a connection between a circuit-switched network and packet-switched network wherein the connection set-up comprises a call policy control protocol over an Mt interface as a data path (*see column 3 lines 52-62, which recite a server that implements call policies by storing and assigning an address list, server telephone number, and information that the call connection is possible*).

For claim 33, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises the steps of forwarding, via another data path, a join request to join the conference call from a requesting participant to at least one requested participant specified in the conference request, wherein the join request comprises the conference routing number and a connection setup step comprises setting up a circuit-switched connection from the at least one requested participant to application server using the conference routing number. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that

utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request is forwarded to all the participants (*see column 9 lines 11-14*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 34, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises forwarding the request using a session initiation protocol Refer message and the connection setup step comprises establishing the at least one circuit-switched connection using session initiation protocol Invite message. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The join request comprises SIP REFER messages that are forwarded to all the participants (*see column 9 lines 11-14*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to

use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 35, Hyllander et al. disclose an apparatus comprising:

a transmitter configured to transmit via a data path a call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite transmitting a connection request to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*);

a communicator configured to receive at the user terminal via the data path a temporary routing number as a call routing number for the requested call service, the temporary routing number received in response to the call request (*see column 3 lines 1-7, which recite the subscriber that receives a server's telephone number as a temporary routing number*);

an establisher configured to establish a circuit-switched call leg connection from the user terminal to a packet-switched network via a circuit-switched network (*see figure 2, which recite a user terminal 8 that establishes a circuit-switched call leg to the packet-switched network 3 via circuit-switched GSM network 9*), using the temporary routing number as the routing number for the requested call service (*see column 3 lines 8-14, which recite establishing the connection from the user terminal to a packet-switched network by calling a number provided by application server, wherein the number provided by the application server functions as a temporary routing number*), wherein the circuit-switched call leg connection is used for providing a packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*); and

a processor configured to use the received temporary routing number to set up the circuit-switched call leg as a call leg of the call service (*see column 3 lines 8-14 and figure 2, which recite the subscriber terminal 8 that establishes a circuit-switched call leg to the GSM network 9 by calling the provided server telephone number*).

Hyllander et al. disclose establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network (*see figures 1 and 2*). Hyllander et al. disclose the subject matter of the claimed invention with the exception that the call connection is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*). The method and system includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see*

figure 3b and figure 8). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the conference server 152 to invite two or more participants to a conference call as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by coupling the Conference Server 152 as taught by Chaney et al. with the Telephony/Internet Server 11 as taught by Hyllander et al. Specifically, the Telephony/Internet Server 11 can be modified to forward call requests to the Conference Server 152 as taught by Chaney et al. rather than a specific internet user as taught by Hyllander et al. The combined functionality of the Conference Server 152 and Telephony/Internet Server 11 facilitates the reception and response to a conference request via SMS as taught by Hyllander et al. as well as the ability to invite additional parties to a conference call as taught by Chaney et al. The motivation for using the conference server that provides a conference service to multiple participants as suggested by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the system by allowing more than two parties to participate in a conference call.

Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the temporary routing number is sent to at least one other participant at one or more other user terminals connected to the application server via the circuit switched network or via one or more other circuit switched networks. However, Chow et al. disclose a wireless system that allows a subscriber to perform call conference calling (*see column 2 lines 30-44*). A third party on a circuit switched network receives an incoming call as a request for the

third party to join a conference call (*see column 9 lines 9-32*). The incoming call may be received as a SMS message with information regarding the conference call (*see column 4 lines 25-49*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that allows a subscriber to perform call conferencing by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks as taught by Chaney et al. and Hyllander et al. The Conference Server 152 as taught by Chaney et al. can be configured to send additional conference requests to add participants to a conference call as taught by Chow et al. The additional conference requests can be forwarded from the Conference Server 152 to the Telephony/Internet Server 11, which can then send the SMS requests as taught by Hyllander et al. The motivation for using the system that allows a subscriber to perform call conference calling by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks is to improve the usability of the system by allowing additional participants on a circuit switched network to be added to conference calls.

For claim 37, Hyllander et al. disclose a terminal device for establishing a connection between a circuit-switched network and packet-switched network wherein the communication means is configured to use a short message service channel for forwarding the call request (*see column 2 lines 27-30, which recite using a SMS channel*).

For claim 38, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the communication means is configured to use a session initiation protocol message for forwarding the conference request. Chaney et al. from the

same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 39, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the communication means is configured to use at least one session initiation protocol or service description protocol extension for communicating circuit-switched specific information. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control

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can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 40, Hyllander et al. disclose a terminal device for establishing a connection between a circuit-switched network and packet-switched network wherein the communication means and the establishing means are integrated in a telephony application of the terminal device *(see column 2 lines 4-11, which recite a SMS communication means used to establish a connection that is integrated in the mobile terminals).*

For claim 41, Hyllander et al. disclose a terminal device for establishing a connection between a circuit-switched network and packet-switched network wherein a call application is implemented as a native client application or as a midlet application *(see column 2 lines 4-11, which recite a SMS communication means used to establish a call that is integrated in the mobile terminals).*

For claim 42, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the communicator is configured to transmit the conference request in consequence of receiving a first request from another user. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network *(see abstract)* that utilizes SIP control signaling for call setup and call control *(see column 2 lines 36-45)*. The terminal transmits a conference request SIP REFER message 103 in

response to a first conference request SIP REFER message 102 (*see figure 5*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 43, Hyllander et al. disclose an apparatus comprising:

a communicator configured to receive a call request via a data path, the call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite receiving a connection request directed to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*);

a deliverer configured to deliver, in response to the call request, a temporary routing number to the user terminal for the circuit-switched network via the data path (*see column 3 lines 1-7, which recite the transmitting a server's telephone number as a temporary routing number*),

wherein the connection from the packet-switched network to the circuit-switched network is used to provide the packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*), the temporary routing number comprising a routing number configured as an E.164 number (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

Hyllander et al. disclose establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network (*see figures 1 and 2*). Hyllander et al. disclose the subject matter of the claimed invention with the exception that the call connection is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*). The method and system includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the conference server 152 to invite two or more participants to a conference call as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by coupling the Conference Server 152 as taught by Chaney et al. with the Telephony/Internet Server 11 as taught by Hyllander et al. Specifically, the Telephony/Internet Server 11 can be modified to forward call requests to the Conference Server 152 as taught by Chaney et al. rather than a specific internet user as taught by Hyllander et al. The combined functionality of the Conference Server 152 and

Telephony/Internet Server 11 facilitates the reception and response to a conference request via SMS as taught by Hyllander et al. as well as the ability to invite additional parties to a conference call as taught by Chaney et al. The motivation for using the conference server that provides a conference service to multiple participants as suggested by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the system by allowing more than two parties to participate in a conference call.

Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the temporary routing number is sent to at least one other participant at one or more other user terminals connected to the application server via the circuit switched network or via one or more other circuit switched networks. However, Chow et al. disclose a wireless system that allows a subscriber to perform call conference calling (*see column 2 lines 30-44*). A third party on a circuit switched network receives an incoming call as a request for the third party to join a conference call (*see column 9 lines 9-32*). The incoming call may be received as a SMS message with information regarding the conference call (*see column 4 lines 25-49*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that allows a subscriber to perform call conferencing by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks as taught by Chaney et al. and Hyllander et al. The Conference Server 152 as taught by Chaney et al. can be configured to send additional conference requests to add participants to a conference call as taught by Chow et al. The additional conference requests can be forwarded from the Conference Server 152 to the

Telephony/Internet Server 11, which can then send the SMS requests as taught by Hyllander et al. The motivation for using the system that allows a subscriber to perform call conference calling by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks is to improve the usability of the system by allowing additional participants on a circuit switched network to be added to conference calls.

For claim 45, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network, further comprising allocating means for allocating said call routing number as a temporary E.164 number to said call (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

For claim 46, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein said allocator is configured to reserve a plurality of E.164 numbers for a plurality of conference calls. However, Hyllander et al. disclose a system for establishing a connection between a circuit-switched network and packet-switched network that provides a telephone number for subscribers to access conference calls hosted by the server (*see column 2 lines 57-63*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use a plurality of telephone numbers to host a plurality of conference calls. A plurality of telephone numbers can be used with the server that hosts conference calls by configuring the server to accept calls made to a plurality of telephone numbers. The motivation for using a plurality of telephone numbers is to increase the functionality of the server to handle a plurality of conference calls.

For claim 47, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein said reserved plurality of E.164 numbers comprises a plurality of toll-free numbers and a plurality of charged numbers. However, Hyllander et al. disclose a system for establishing a connection between a circuit-switched network and packet-switched network that provides a telephone number for subscribers to access conference calls hosted by the server (*see column 2 lines 57-63*). The telephone numbers can be either toll-free numbers or charged numbers. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use a plurality of toll-free and charged telephone numbers to host a plurality of conference calls. A plurality of toll-free and charged telephone numbers can be used with the server that hosts conference calls by configuring the server to accept calls made to a plurality of telephone numbers. The motivation for using a plurality of toll-free and charged telephone numbers is to increase the functionality of the server to handle a plurality of conference calls.

For claim 48, Hyllander et al. disclose all the subject matter of the claimed invention with the exception wherein said allocator is configured to select said E.164 number from said plurality of charged numbers included in said conference request. However, Hyllander et al. disclose a system for establishing a connection between a circuit-switched network and packet-switched network that provide a telephone number for subscribers to access conference calls hosted by the server (*see column 2 lines 57-63*). The telephone numbers can be either toll-free numbers or charged numbers. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to select a number from a plurality of charged telephone numbers to host a plurality of conference calls. A plurality of charged telephone numbers can be

used with the server that hosts conference calls by configuring the server to accept calls made to a plurality of telephone numbers. The motivation for using a plurality of charged telephone numbers is to increase the functionality of the server to handle a plurality of conference calls.

For claim 49, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network wherein said communication means is configured to send a call routing number via a respective data path to other participants specified in a call request (*see column 3 lines 1-7, which recite sending a server's telephone number as a temporary routing number*).

For claim 50, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network, further comprising: checker configured to control whether callers of received calls relating to said call match with said other participants specified in said call request (*see column 8 lines 44-50, which recite identifying the calling party and associating the telephone call with a previously determined Internet address requested by the calling party*).

For claim 51, Hyllander et al. and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the method for establishing a connection between a circuit-switched network and packet-switched network further comprises a connection controller configured to control individual call legs of participants in a media gateway device. Chaney et al. from the same or similar fields of endeavor disclose a subscriber service in a telecommunications network (*see abstract*) that utilizes SIP control signaling for call setup and call control (*see column 2 lines 36-45*). The SIP standard provides a INVITE, REFER, and BYE message that allows individual call legs to be manage. Thus, it would have been obvious to the

person of ordinary skill in the art at the time of the invention to use SIP control signaling for call setup and call control as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. and Chow et al. SIP control signaling for call setup and call control can be implemented by installing a modified conference server 152 as taught by Chaney et al. in the IP network to send and receive SIP messages with a SIP enabled mobile terminal. The motivation for using SIP control signaling for call setup and call control with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the network by allowing terminals to request various services on a network without knowing the network ID of the corresponding servers.

For claim 52, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network, further comprising an interface configured to provide a direct connection to a media gateway control device to enable routing of a set-up call for a call from said circuit-switched network to an application server (*see column 8 lines 44-51, which recite a server that forwards a call from a calling party to an Internet address*).

For claim 53, Hyllander et al. disclose an apparatus for establishing a connection between a circuit-switched network and packet-switched network, further comprising an implementer configured to implement media gateway controller functions in the said server device (*see column 8 lines 44-51, which recite a server that performs the functions of a gateway controller to setup and maintain connections between a circuit-switched network and packet-switched network*).

For claim 54, Hyllander et al. discloses a computer program embodied on a computer-readable medium, the computer program configured to control a processor to perform operations comprising:

transmitting via a data path a call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite transmitting a connection request to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*);

receiving a temporary routing number at the user terminal via the data path as a routing number for the requested call service, the temporary routing number received in response to the call request (*see column 3 lines 1-7, which recite the subscriber that receives a server's telephone number as a temporary routing number*);

establishing a circuit-switched call leg connection from the user terminal to a packet-switched network via a circuit-switched network (*see figure 2, which recite a user terminal 8 that establishes a circuit-switched call leg to the packet-switched network 3 via circuit-switched GSM network 9*) using the temporary routing number as the routing number for the requested call service (*see column 3 lines 8-14, which recite establishing the connection from the user terminal to a packet-switched network by calling a number provided by application server, wherein the number provided by the application server functions as a temporary routing number*), wherein the circuit-switched call leg connection is used for providing a packet-switched call service to the

circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*); and

using the received temporary routing number to set up the circuit-switched call leg as a call leg of the call service (*see column 3 lines 8-14 and figure 2, which recite the subscriber terminal 8 that establishes a circuit-switched call leg to the GSM network 9 by calling the provided server telephone number*).

Hyllander et al. disclose establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network (*see figures 1 and 2*). Hyllander et al. disclose the subject matter of the claimed invention with the exception that the call connection is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*). The method and system includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the conference server 152 to invite two or more participants to a conference call as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by coupling the Conference Server 152 as taught by Chaney et al. with the Telephony/Internet Server 11 as taught by Hyllander et al. Specifically, the Telephony/Internet Server 11 can be modified to forward call requests to the Conference Server 152 as taught by Chaney et al. rather than a specific internet user as taught by Hyllander et al. The combined functionality of the Conference Server 152 and

Telephony/Internet Server 11 facilitates the reception and response to a conference request via SMS as taught by Hyllander et al. as well as the ability to invite additional parties to a conference call as taught by Chaney et al. The motivation for using the conference server that provides a conference service to multiple participants as suggested by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the system by allowing more than two parties to participate in a conference call.

Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the temporary routing number is sent to at least one other participant at one or more other user terminals connected to the application server via the circuit switched network or via one or more other circuit switched networks. However, Chow et al. disclose a wireless system that allows a subscriber to perform call conference calling (*see column 2 lines 30-44*). A third party on a circuit switched network receives an incoming call as a request for the third party to join a conference call (*see column 9 lines 9-32*). The incoming call may be received as a SMS message with information regarding the conference call (*see column 4 lines 25-49*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that allows a subscriber to perform call conferencing by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks as taught by Chaney et al. and Hyllander et al. The Conference Server 152 as taught by Chaney et al. can be configured to send additional conference requests to add participants to a conference call as taught by Chow et al. The additional conference requests can be forwarded from the Conference Server 152 to the

Telephony/Internet Server 11, which can then send the SMS requests as taught by Hyllander et al. The motivation for using the system that allows a subscriber to perform call conference calling by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks is to improve the usability of the system by allowing additional participants on a circuit switched network to be added to conference calls.

For claim 55, Hyllander et al. discloses a computer program embodied on a computer-readable medium, the computer program configured to control a processor to perform operations comprising:

receiving a call request via a data path, the call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite receiving a connection request directed to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*); and

deliver, in response to the call request, a temporary routing number to the user terminal device for the circuit-switched network via the data path (*see column 3 lines 1-7, which recite the transmitting a server's telephone number as a temporary routing number*), wherein the connection from a packet-switched network to the circuit-switched network is used to provide the packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-*

switched network 9), the temporary routing number comprising a routing number configured as an E.164 number (see column 2 lines 57-63, which recite using the server telephone number as the routing number).

Hyllander et al. disclose establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network (*see figures 1 and 2*). Hyllander et al. disclose the subject matter of the claimed invention with the exception that the call connection is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*). The method and system includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the conference server 152 to invite two or more participants to a conference call as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by coupling the Conference Server 152 as taught by Chaney et al. with the Telephony/Internet Server 11 as taught by Hyllander et al. Specifically, the Telephony/Internet Server 11 can be modified to forward call requests to the Conference Server 152 as taught by Chaney et al. rather than a specific internet user as taught by Hyllander et al. The combined functionality of the Conference Server 152 and Telephony/Internet Server 11 facilitates the reception and response to a conference request via SMS as taught by Hyllander et al. as well as the ability to invite additional parties to a conference call as taught by Chaney et al. The motivation for using the conference server that

provides a conference service to multiple participants as suggested by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the system by allowing more than two parties to participate in a conference call.

Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the temporary routing number is sent to at least one other participant at one or more other user terminals connected to the application server via the circuit switched network or via one or more other circuit switched networks. However, Chow et al. disclose a wireless system that allows a subscriber to perform call conference calling (*see column 2 lines 30-44*). A third party on a circuit switched network receives an incoming call as a request for the third party to join a conference call (*see column 9 lines 9-32*). The incoming call may be received as a SMS message with information regarding the conference call (*see column 4 lines 25-49*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that allows a subscriber to perform call conferencing by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks as taught by Chaney et al. and Hyllander et al. The Conference Server 152 as taught by Chaney et al. can be configured to send additional conference requests to add participants to a conference call as taught by Chow et al. The additional conference requests can be forwarded from the Conference Server 152 to the Telephony/Internet Server 11, which can then send the SMS requests as taught by Hyllander et al. The motivation for using the system that allows a subscriber to perform call conference calling by adding requested parties as taught by Chow et al. with the method for establishing a

conference call between circuit-switched and packet-switched networks is to improve the usability of the system by allowing additional participants on a circuit switched network to be added to conference calls.

For claim 56, Hyllander et al. discloses an apparatus, comprising:

transmission means for transmitting via a data path a call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite transmitting a connection request to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*);

communication means for receiving a temporary routing number at the user terminal via the data path as a routing number for the requested call service, the temporary routing number received in response to the call request (*see column 3 lines 1-7, which recite the subscriber that receives a server's telephone number as a temporary routing number*); and

establishing means for establishing a circuit-switched call leg connection from the user terminal to a packet-switched network via a circuit-switched network (*see figure 2, which recite a user terminal 8 that establishes a circuit-switched call leg to the packet-switched network 3 via circuit-switched GSM network 9*) using the temporary routing number as the routing number for the requested call service (*see column 3 lines 8-14, which recite establishing the connection from the user terminal to a packet-switched network by calling a number provided by application server, wherein the number provided by the application server functions as a temporary routing*

number), wherein the connection is used for providing a packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*); and

processing means for using the received temporary routing number to set up the circuit-switched call leg as a call leg of the call service (*see column 3 lines 8-14 and figure 2, which recite the subscriber terminal 8 that establishes a circuit-switched call leg to the GSM network 9 by calling the provided server telephone number*).

Hyllander et al. disclose establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network (*see figures 1 and 2*). Hyllander et al. disclose the subject matter of the claimed invention with the exception that the call connection is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*). The method and system includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the conference server 152 to invite two or more participants to a conference call as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by coupling the Conference Server 152 as taught by Chaney et al. with the Telephony/Internet Server 11 as taught by Hyllander et al. Specifically, the Telephony/Internet Server 11 can be modified to forward call requests to the Conference Server 152 as taught by Chaney et al. rather than a specific internet

user as taught by Hyllander et al. The combined functionality of the Conference Server 152 and Telephony/Internet Server 11 facilitates the reception and response to a conference request via SMS as taught by Hyllander et al. as well as the ability to invite additional parties to a conference call as taught by Chaney et al. The motivation for using the conference server that provides a conference service to multiple participants as suggested by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the system by allowing more than two parties to participate in a conference call.

Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the temporary routing number is sent to at least one other participant at one or more other user terminals connected to the application server via the circuit switched network or via one or more other circuit switched networks. However, Chow et al. disclose a wireless system that allows a subscriber to perform call conference calling (*see column 2 lines 30-44*). A third party on a circuit switched network receives an incoming call as a request for the third party to join a conference call (*see column 9 lines 9-32*). The incoming call may be received as a SMS message with information regarding the conference call (*see column 4 lines 25-49*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that allows a subscriber to perform call conferencing by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks as taught by Chaney et al. and Hyllander et al. The Conference Server 152 as taught by Chaney et al. can be configured to send additional conference requests to add participants to a conference call as taught by Chow et al. The

additional conference requests can be forwarded from the Conference Server 152 to the Telephony/Internet Server 11, which can then send the SMS requests as taught by Hyllander et al. The motivation for using the system that allows a subscriber to perform call conference calling by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks is to improve the usability of the system by allowing additional participants on a circuit switched network to be added to conference calls.

For claim 57, Hyllander et al. discloses an apparatus, comprising:

communication means for receiving, call request via a data path, the call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite receiving a connection request directed to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*); and

delivering means for delivering, in response to the call request, a temporary routing number to the user terminal for the circuit-switched network via the data path (*see column 3 lines 1-7, which recite the transmitting a server's telephone number as a temporary routing number*), wherein the connection from a packet-switched network to the circuit-switched network is used to provide the packet-switched call service to the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*), the temporary routing number comprising a routing number

configured as an E.164 number (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

Hyllander et al. disclose establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network (*see figures 1 and 2*). Hyllander et al. disclose the subject matter of the claimed invention with the exception that the call connection is a conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*). The method and system includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the conference server 152 to invite two or more participants to a conference call as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by coupling the Conference Server 152 as taught by Chaney et al. with the Telephony/Internet Server 11 as taught by Hyllander et al. Specifically, the Telephony/Internet Server 11 can be modified to forward call requests to the Conference Server 152 as taught by Chaney et al. rather than a specific internet user as taught by Hyllander et al. The combined functionality of the Conference Server 152 and Telephony/Internet Server 11 facilitates the reception and response to a conference request via SMS as taught by Hyllander et al. as well as the ability to invite additional parties to a conference call as taught by Chaney et al. The motivation for using the conference server that provides a conference service to multiple participants as suggested by Chaney et al. with the

method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the system by allowing more than two parties to participate in a conference call.

Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the temporary routing number is sent to at least one other participant at one or more other user terminals connected to the application server via the circuit switched network or via one or more other circuit switched networks. However, Chow et al. disclose a wireless system that allows a subscriber to perform call conference calling (*see column 2 lines 30-44*). A third party on a circuit switched network receives an incoming call as a request for the third party to join a conference call (*see column 9 lines 9-32*). The incoming call may be received as a SMS message with information regarding the conference call (*see column 4 lines 25-49*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that allows a subscriber to perform call conferencing by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks as taught by Chaney et al. and Hyllander et al. The Conference Server 152 as taught by Chaney et al. can be configured to send additional conference requests to add participants to a conference call as taught by Chow et al. The additional conference requests can be forwarded from the Conference Server 152 to the Telephony/Internet Server 11, which can then send the SMS requests as taught by Hyllander et al. The motivation for using the system that allows a subscriber to perform call conference calling by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks is to improve the

usability of the system by allowing additional participants on a circuit switched network to be added to conference calls.

For claim 58, Hyllander et al. discloses a method, comprising:

receiving call request via a data path, the call request directed to an application server providing a packet-switched call service to a circuit-switched network, the packet-switched call service provided using a connection between a packet-switched network and a user terminal via the circuit-switched network (*see column 2 lines 57-63 and figure 2, which recite receiving a connection request directed to a telephony/Internet application server 11 that provides a call service using a connection between a packet-switched network 3 and user terminal 8 via circuit-switched network 9*); and

delivering, in response to the call request, a temporary routing number to the user terminal for the circuit-switched network via the data path (*see column 3 lines 1-7, which recite the transmitting a server's telephone number as a temporary routing number*), wherein the connection from a packet-switched network to the circuit-switched network is used to provide the packet-switched call service to said the circuit-switched network (*see figure 2, which recite a telephony/Internet server 11 that provides a packet-switched call service to the GSM circuit-switched network 9*), the temporary routing number comprising a routing number configured as an E.164 number (*see column 2 lines 57-63, which recite using the server telephone number as the routing number*).

Hyllander et al. disclose establishing a call connection from a user terminal to a packet-switched network via a circuit-switched network (*see figures 1 and 2*). Hyllander et al. disclose the subject matter of the claimed invention with the exception that the call connection is a

conference call service between more than two users. However, Chaney et al. from the same or similar fields of endeavor discloses a conference system and method in a telecommunications network (*see abstract*). The method and system includes a conference server 152 that receives a conference request at step 82 and invites participants to join the conference call at step 84 (*see figure 3b and figure 8*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the conference server 152 to invite two or more participants to a conference call as taught by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al. The conference service system and method can be implemented by coupling the Conference Server 152 as taught by Chaney et al. with the Telephony/Internet Server 11 as taught by Hyllander et al. Specifically, the Telephony/Internet Server 11 can be modified to forward call requests to the Conference Server 152 as taught by Chaney et al. rather than a specific internet user as taught by Hyllander et al. The combined functionality of the Conference Server 152 and Telephony/Internet Server 11 facilitates the reception and response to a conference request via SMS as taught by Hyllander et al. as well as the ability to invite additional parties to a conference call as taught by Chaney et al. The motivation for using the conference server that provides a conference service to multiple participants as suggested by Chaney et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the functionality of the system by allowing more than two parties to participate in a conference call.

Hyllander et al. and Chaney et al. disclose all the subject matter of the claimed invention with the exception that the temporary routing number is sent to at least one other participant at

one or more other user terminals connected to the application server via the circuit switched network or via one or more other circuit switched networks. However, Chow et al. disclose a wireless system that allows a subscriber to perform call conference calling (*see column 2 lines 30-44*). A third party on a circuit switched network receives an incoming call as a request for the third party to join a conference call (*see column 9 lines 9-32*). The incoming call may be received as a SMS message with information regarding the conference call (*see column 4 lines 25-49*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the system that allows a subscriber to perform call conferencing by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks as taught by Chaney et al. and Hyllander et al. The Conference Server 152 as taught by Chaney et al. can be configured to send additional conference requests to add participants to a conference call as taught by Chow et al. The additional conference requests can be forwarded from the Conference Server 152 to the Telephony/Internet Server 11, which can then send the SMS requests as taught by Hyllander et al. The motivation for using the system that allows a subscriber to perform call conference calling by adding requested parties as taught by Chow et al. with the method for establishing a conference call between circuit-switched and packet-switched networks is to improve the usability of the system by allowing additional participants on a circuit switched network to be added to conference calls.

10. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyllander et al. (U.S. Patent 7,065,199), Chaney et al. (U.S. Patent 7,184,415), and Chow et al. (U.S. Patent 6,535,730) as applied to claim 1, and further in view of Hirni et al. (U.S. Patent 6,731,609).

For claim 11, Hyllander et al., Chaney et al., and Chow et al. disclose all the subject matter of the claimed invention with the exception that the method for establishing a connection between a circuit-switched network and packet-switched network further comprises the step of converting the circuit-switched call leg into a voice-over internet protocol connection in a core network of the packet-switched network. Hirni et al. from the same or similar fields of endeavor disclose a telephony system for conducting multimedia telephonic conferences between a packet-based network and circuit-switched PSTN network (*see abstract*) that provides calls using VOIP (*see column 3 lines 52-67*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to deploy a telephony system using VOIP as taught by Hirni et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al., Chaney et al., and Chow et al. A telephony system using VOIP can be implemented by installing agent systems 18 to handle multimedia telephone calls as taught by Hirni et al. with the in the IP network. The motivation for using a VOIP voice telephony system with the method for establishing a connection between a circuit-switched network and packet-switched network is to reduce the cost of the system for users.

For claim 12, Hyllander et al., Chaney et al., and Chow et al. disclose all the subject matter of the claimed invention with the exception wherein the establishing step comprises performing using integrated services digital network user part. Hirni et al. from the same or similar fields of endeavor disclose a telephony system for conducting multimedia telephonic

conferences between a packet-based network and circuit-switched PSTN network (*see abstract*) that provides calls using ISDN (*see column 14 lines 35-46*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to deploy a telephony system using ISDN as taught by Hirni et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al., Chaney et al., and Chow et al. A telephony system using ISDN can be implemented by providing a Q.931 module to handle the ISDN connection control protocol as by Hirni et al. in the server system. The motivation for using a ISDN telephony system with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the compatibility of the network with various subscriber access means.

11. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyllander et al. (U.S. Patent 7,065,199), Chaney et al. (U.S. Patent 7,184,415), and Chow et al. (U.S. Patent 6,535,730) as applied to claim 59, and further in view of Kaczmarczyk et al. (U.S. Patent 6,775,269).

For claim 59, Hyllander et al., Chaney et al., and Chow et al. disclose all the subject matter of the claimed invention with the exception that the method for establishing a connection between a circuit-switched network and packet-switched network further comprises controlling individual call legs of participants in a media gateway device. Kaczmarczyk et al. from the same or similar fields of endeavor disclose a method and system for routing telephone calls between a circuit-switched PSTN network 12 and packet-switched network 14 through a Media Gateway 18 (*see abstract and figure 1*). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to deploy the media gateway 18 to establish calls between a

circuit-switched PSTN network 12 and packet-switched network 14 as taught by Kaczmarczyk et al. with the method for establishing a connection between a circuit-switched network and packet-switched network as taught by Hyllander et al., Chaney et al., Chow et al. The media gateway 18 as taught by Kaczmarczyk et al. can be implemented by using the media gateway 18 in place of the telephony/Internet server 11 as taught by Hyllander et al. The motivation for using media gateway 18 as suggested by Kaczmarczyk et al. with the method for establishing a connection between a circuit-switched network and packet-switched network is to improve the routing of telephone calls (*see column 2 lines 26-30*).

Response to Arguments

12. The Applicant has amended claims 1, 35, 43, and 54-58. It is noted with appreciation that the Applicant has carefully considered the previous Office Action and the cited prior art references. However, the Applicant's arguments filed December 21st, 2009 regarding the 35 USC 103(a) rejections have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (*please see form PTO-892*).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
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